What is the effect of saturated fat (SFA) intake on increased risk of cardiovascular disease or type 2 diabetes, including effects on intermediate markers such as serum lipid and lipoprotein levels? (DGAC 2010)

Conclusion

Strong evidence indicates that dietary saturated fatty acids (SFA) are positively associated with intermediate markers and end-point health outcomes for two distinct metabolic pathways: 1) increased serum total cholesterol (TC) and LDL cholesterol (LDL-C) and increased risk of cardiovascular disease (CVD) and 2) increased markers of insulin resistance and increased risk of type 2 diabetes (T2D). Conversely, decreased SFA intake improves measures of both CVD and T2D risk. The evidence shows that a five percent energy decrease in SFA, replaced by monounsaturated fatty acids (MUFA) or polyunsaturated fatty acids (PUFA), decreases risk of CVD and T2D in healthy adults and improves insulin responsiveness in insulin resistant and T2D subjects.

Grade: Strong

Overall strength of the available supporting evidence: Strong; Moderate; Limited; Expert Opinion Only; Grade not assignable For additional information regarding how to interpret grades,click here.

Evidence Summaries
What is the evidence that supports this conclusion? For more information, click on the Evidence Summary link below.

What is the effect of saturated fat intake on increased risk of cardiovascular disease or type 2 diabetes?

Search Plan and Results
What were the search parameters and selection criteria used to identify literature to answer this question? For more information, click on the Search Plan and Results link below.

Saturated fat and lipid levels